Stöllinger

· Ausrüstung für Grill Koch ·

THE ART OF SMOKING

WHAT OTHERS FOOD Won't Tell YOU...

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Introduction

Smoking is an ancient tradition that not only enriches the flavour of food but also helps to preserve it naturally. The cold smoking process is distinguished by its subtlety – the smoke slowly permeates the food, imparting a unique taste and aroma. It is a great way to experiment with various products: from fish and meat to cheeses and vegetables.

To achieve the highest quality and avoid misunderstandings, reliable equipment is essential. The "Stollinger" cold smoking generator is designed to ensure a stable and cold flow of smoke, ideal for the cold smoking process. It is important to emphasise that this generator does not control the temperature of the smoking chamber, but the smoke it generates remains cool.

Although the "Stollinger" generator is intended for the cold smoking process, it can also be used for hot smoking. By installing a heating element, a temperature regulator, and a thermometer in the smoking chamber, higher temperatures can be achieved, allowing the generator to be used for hot smoking. This way, you can easily transition from the subtleties of cold smoking to the more intense aromas and textures of hot smoking.

Let this booklet become your reliable companion on your journey into the world of smoking!

Smoker Maintenance and Usage

Filling the Smoker and Preparing Wood Chips

- Only use dry wood chips to ensure consistent smoke generation. The size of the wood chips can range from 2 to 10 mm.
- Store wood chips in a dry place to avoid moisture, which can disrupt the smoke generation process.

Maintaining the Smoke Generator During Smoking

- A fully loaded Stollinger cold smoke generator can operate for 4–5 hours, depending on the smoke intensity.
- During smoking, it is recommended to regularly monitor the generator:
    - Carefully open the lid and stir the wood chips with a long metal skewer to prevent them from sticking to the cylinder walls due to possible condensation.
    - If the wood chips stick or an empty space forms at the bottom of the generator, this can cause the smoke generation to stop.

    - If necessary, add new wood chips to maintain consistent smoke generation.

Cleaning and Ash Removal

- The Stollinger smoke generator has two metal plates: the lower one features a lock symbol, and the upper one has an arrow indicating the plate's position.
- After each smoking cycle or every other time, clean the generator:
    - Ensure the generator has cooled down. Use protective gloves if necessary.
    - Place a container under the cylinder to collect ash.
    - Turn the lower plate to the "unlocked" position and remove the accumulated ash.
    - Remove any remaining ash with a long metal skewer through the top of the cylinder.
    - Turn the lower plate back to the "locked" position, refill the cylinder with wood chips, and continue operation.

Recommendations

- Regularly monitor the smoke generator to ensure that accumulated ash does not block the bottom of the generator where the burning process

occurs. Excessive ash can hinder smoke generation and reduce efficiency.

Salt Types and Recommendations

Salt is a key component in the smoking process, responsible for flavor, product preservation, and safety. This section provides recommendations on how to properly use regular and nitrite salt, as well as important tips on their proportions and preparation.

Regular Salt

- **Non-iodized salt**: Recommended for smoking as it does not contain additional substances that could affect the flavor.
- **Iodized salt**: Suitable for use but may slightly alter the final taste of the product. Therefore, non-iodized salt is preferred for smoking.

Usage Proportions:

- **For dry curing**: 30–60 g of salt per kilogram of meat.
- **For wet curing**: 50–120 g of salt per liter of water, depending on the type of meat and marinating duration.

Nitrite Salt

Nitrite salt is an essential component for smoking meat, especially in cold smoking. It gives the product an attractive pinkish hue, enhances flavor, and protects against bacterial growth.

Composition

- **Natural salt mixture (NaCl)**
- **Sodium nitrite ($NaNO_2$)**, which makes up 0.4–0.6% of the total nitrite salt mixture

Proportions

- **For dry curing**: 5–6 g of nitrite salt per kilogram of meat, with the remaining amount being regular salt.
- **For wet curing**: 50–80 g of salt per liter of water, where 20–30% of this amount is nitrite salt.

Example – Cold-Smoked Chicken

Solution Composition:

- 1 liter of water
- 15–20 g of nitrite salt + the remaining amount of regular salt to make a total of about 70 g

Marinating Time: 2–3 days

Result: A safe, optimally salted product with a delicate color and flavor.

Important Tips

1. **Follow the manufacturer's recommendations**: Always adhere to the recommendations provided by the nitrite salt manufacturer on the packaging. If the recipe proportions differ from the manufacturer's instructions, prioritize the manufacturer's guidelines to ensure safety and effectiveness.
2. **Control concentration**: Excess nitrite salt can be harmful to health – its concentration must be strictly controlled.
3. **Wet curing**: When using nitrite salt for wet curing, it should only be added after the solution has completely cooled to room temperature. Boil the solution with regular salt and spices only, then mix in the nitrite salt once the solution has cooled.
4. **Marinating methods**: Dry marinating is better suited for longer curing times and fattier products, while wet marinating is ideal for quicker preparation and leaner cuts of meat.
5. **Control marinating time**: Extended marinating can result in higher salt absorption, so it is important to monitor the marinating duration.

Wood Chip Variety and Flavour Differences

This section discusses some of the most popular types of wood used for smoking. Each type of wood imparts a unique flavour and aroma, making the right choice essential for enhancing the taste of your food. Below are several popular types of wood chips:

Alder

- **Flavour and aroma:** Delivers a mild, slightly sweet flavour with a subtle aroma.
- **Usage:** A versatile option suitable for fish, poultry, and pork.
- **Additional information:** Alder smoke gives food a golden-brown colour.

Cherry

- **Flavour and aroma:** Sweet, fruity aroma that adds a bold flavour to food.
- **Usage:** Perfect for pork, poultry, and fish.
- **Additional information:** Smoking with cherry wood gives food a darker colour.

Oak

- **Flavour and aroma:** Provides a strong, intense smoky flavour with earthy tones.
- **Usage:** Best suited for beef, pork, and sausages.
- **Additional information:** Oak chips burn at high temperatures for a long time, imparting a deep flavour.

Apple

- **Flavour and aroma:** Mild, slightly sweet, fruity smoky flavour.
- **Usage:** Pairs well with pork, poultry, and fish.
- **Additional information:** Applewood provides a subtle aroma that doesn't overwhelm the natural taste of food.

Beech

- **Flavour and aroma:** Offers a mild, light smoky flavour.
- **Usage:** Suitable for fish, poultry, and cheese.
- **Additional information:** Beechwood produces little smoke when burning, making it a popular choice for milder-flavoured products.

Additional tip: Don't be afraid to experiment and mix different types of wood chips. This can help you discover a unique combination of flavours and aromas that best suit your preferences.

Smoking Temperatures and Methods

The smoking process is divided into two main types: cold smoking and hot smoking. Each method is characterised by specific temperatures, duration, and suitable products.

Cold Smoking

Temperature: 16–30 °C
Duration: 8–24 hours, unless the product or recipe requires a longer smoking time.
Products: Meat, fish, cheese, poultry, sausages

Features:

- **Direct cold-smoked chicken:** Intense smoky flavour profile, ideal for those who prefer the natural aroma and texture of meat. Smoking time can extend up to several days.
- **Pre-cooked chicken:** Juicier, softer, with a subtle smoky aroma. Smoking time is reduced and typically lasts between 8 and 24 hours, depending on the product, its weight, and other criteria.

Both preparation methods are safe if recipe recommendations are followed.

Hot Smoking

Temperature: 80–120 °C
Duration: 40 minutes – 3 hours, depending on the size and type of product.
Products: Meat, fish, poultry, sausages

Features:

- Products are thermally processed and ready for consumption immediately after the process.
- Hot smoking imparts a milder smoky flavour profile and a juicier texture.
- Higher temperatures make the meat softer and more aromatic.
- **Use a food thermometer:** It is essential to check the internal temperature of the meat. Insert the thermometer into one of the larger pieces of meat and monitor its internal temperature. Once the required temperature is reached, the product can be considered ready and safe to consume.

Cold-Smoked Chicken (Cooked and Smoked, 3 kg)

Ingredients:

- ***Chicken*** – 3 kg (2 medium chickens, preferably halved)
- ***Water*** – 2 litres (enough to completely cover 3 kg of chicken)
- ***Salt*** (total: 130 g per 2 litres of water):
  - ***Regular salt*** – 91 g (70% of total salt weight)
  - ***Nitrite salt*** – 39 g (30% of total salt weight)
- ***Sugar*** – 60 g
- ***Bay leaves*** – 4 pcs.
- ***Black pepper*** (whole) – 1 teaspoon
- ***Garlic*** – 4 cloves

Preparation:

1. Preparing the brine:

1. Bring the water to a boil and add regular salt, sugar, bay leaves, pepper, and minced garlic. Stir

well until all ingredients are completely dissolved.
2. **Important:** Cool the brine to room temperature before adding the nitrite salt and stir until fully dissolved. Never add nitrite salt to hot or boiling water, as high temperatures can reduce its effectiveness and compromise the product's quality.

2. Marinating:

1. Submerge the chicken in the brine, ensuring it is fully covered.
2. Keep in the refrigerator for 48 hours to 4 days. Periodically turn the chicken to ensure even absorption of the brine.

3. Thermal processing:

1. Remove the chicken from the brine, rinse with clean water, and pat dry.
2. Before thermal processing, prepare the chicken properly: tightly wrap each half in plastic wrap to retain its juiciness.
3. **Recommended thermal processing methods:**
    - **Method 1 – Oven baking:** Set the oven temperature to 85 °C. Insert a food thermometer into the thickest part of the chicken (breast). Place a tray or dish with

water at the bottom of the oven to maintain humidity. Bake for about 1.5 hours until the internal chicken temperature reaches 75 °C. After removing the chicken from the oven, immediately submerge it in cold water. Then unwrap and rinse gently under cold running water.

- **Method 2 – Boiling:** Wrap the chicken in plastic wrap similarly to the baking method. Submerge it in water maintained at 85 °C. Boil for about 1.5 hours until the internal chicken temperature reaches 75 °C. After boiling, remove the chicken from the wrap and rinse gently under cold running water.

4. Drying:

1. Hang the prepared chicken or place it on a rack in a well-ventilated area.
2. After 4–5 hours, check if the chicken is adequately dried. If moisture remains, continue drying. Use a fan if necessary. It is important that the chicken is completely dry to ensure good flavour and an appealing colour during smoking.

5. Smoking:

1. Smoke using the cold-smoking method (20–25 °C) for 10–12 hours.
2. It is recommended to use alder or applewood chips.

6. After smoking:

1. After smoking, hang the chicken in a well-ventilated area for another 6–12 hours to stabilize the aroma and flavour.
2. Then place the chicken in the refrigerator for complete cooling.

7. Storage:

Cold-smoked chicken can be stored in the refrigerator for up to 5 days. If vacuum-packed, the shelf life can extend to 10–14 days.

Result:

Juicy chicken with a delicate smoky flavour, tender texture, and a beautiful golden colour. Perfect as a main dish or appetizer for a festive table.

Homemade Cold-Smoked Sausage with Thermal Processing

Ingredients:

- ***Lean pork*** – 1.5 kg
- ***Pork fat*** – 0.5 kg
- ***Salt*** – 30 g
- ***Nitrite salt*** – 10 g
- ***Sugar*** – 10 g
- ***Ground black pepper*** – to taste
- ***Garlic*** – 5 cloves
- ***Natural or collagen casings*** – as needed

Optional spices:

- ***Dried thyme*** – 1 teaspoon
- ***Cardamom (ground)*** – 1/2 teaspoon
- ***Nutmeg (ground)*** – 1/4 teaspoon

Preparation:

1. Preparing the stuffing:

1. Cut the meat and pork fat into small pieces or grind them using a coarse meat grinder.
2. Add salt, nitrite salt, sugar, ground black pepper, and minced garlic to the meat. Optionally, add the selected spices.
3. Mix the mixture thoroughly by hand or using a kitchen processor for 10–15 minutes until it becomes uniform, sticky, and elastic.
4. Cover the mixture with plastic wrap and leave it in the refrigerator for 12–24 hours to allow the spices to be absorbed and the meat to mature.

2. Preparing the casings:

1. Wash the casings and soak them in water to make them soft.
2. Stuff the casings with the prepared mixture, removing any air bubbles. Form sausages of the desired length and tie the ends.

3. Drying before thermal processing:

1. Hang the sausages in a well-ventilated area or place them on a rack for 2–3 hours to dry their surface and form a film that will help retain juiciness during thermal processing.

4. Thermal processing:

1. Preheat the oven to 80–85°C.
2. Lightly grease the racks with vegetable oil to prevent the sausages from sticking, or hang the sausages in the upper part of the oven. Place a water tray at the bottom of the oven to maintain humidity.
3. Insert a meat thermometer into one of the sausages and heat for about 1.5 hours until the internal temperature reaches 70–72°C.
4. After thermal processing, immediately immerse the sausages in cold water to cool quickly and preserve their texture. Then carefully dry the sausages and prepare them for further drying.

5. Drying after thermal processing:

1. Hang the sausages in a well-ventilated area or place them on a rack for 12–24 hours to ensure they are well dried before smoking.

6. Smoking:

1. Smoke the sausages with cold smoke (20–25°C) for 6–8 hours until they achieve the desired color and flavor.

Notes:

- Optional spices are not necessary but can add a more interesting and richer flavor to the sausages.
- During thermal processing, use a meat thermometer to ensure accurate temperature control and food safety.
- Thermal processing not only ensures food safety but also significantly reduces the overall preparation and smoking time. This method is particularly suitable for homemade sausage production, allowing for faster results while maintaining excellent taste and texture.

Homemade Cold-Smoked Mackerel

Ingredients:

3 medium-sized mackerels (total weight about 1.2 kg)

- ***Salt*** – 36 g (about 2.5 tablespoons)
- ***Sugar*** – 12 g (about 2.5 teaspoons)
- ***Ground black pepper*** – 6 g (1.5 teaspoons)
- ***Ground coriander*** – 6 g (1.5 teaspoons)
- ***Bay leaves*** – 3 leaves (1 per fish)

Note: These quantities are suitable for 1.2 kg of fish. If the weight changes, adjust the ingredients proportionally.

Preparation:

1. Preparing the mackerel:

1. Select fresh, high-quality mackerel. Remove the gills, innards, and, if preferred, the heads.
2. Thoroughly rinse the fish under cold water and pat dry with paper towels.

2. Salting (dry method):

1. Mix the salt, sugar, pepper, and coriander.
2. Thoroughly rub the fish with this mixture, both inside and out.
3. Place one bay leaf into the belly of each fish.
4. Tightly wrap the fish in parchment paper or plastic wrap, place on a flat plate, and refrigerate for 12–24 hours.

Tip: For a more intense flavor, extend the salting time to 36 hours.

3. Drying:

1. Remove the fish from the wrap and rinse under cold water to remove excess salt.
2. Pat the fish dry with paper towels.
3. Hang the fish in a well-ventilated area or place it on a rack for 12–24 hours until the surface is completely dry.

4. Smoking:

1. Prepare the cold smoking equipment, ensuring the temperature in the smoker does not exceed 25°C.
2. Hang the fish or place it on the racks in the smoker, leaving enough space for the smoke to circulate freely.

3. Smoke the fish with cold smoke for 6–8 hours. For a stronger flavor or thicker fish, extend the smoking time to up to 15 hours. The smoking duration depends on the thickness of the fish, the intensity of the smoke, and the temperature in the smoker.

5. After smoking:

1. After smoking, allow the fish to "rest" in a well-ventilated area for at least 2–3 hours. It is recommended to let it rest for several more hours to ensure the flavor and aroma stabilize evenly and to reduce the intensity of the smoke smell.
2. Chill in the refrigerator before serving.

Storage:

- Cold-smoked mackerel can be stored in the refrigerator for up to 7 days.
- Vacuum-packed fish can be stored in the refrigerator for up to 14 days or in the freezer for up to 2 months.

Homemade Hot-Smoked Sausages with Mustard Seeds

Ingredients:

- ***Pork meat:*** 1 kg
- ***Pork belly fat:*** 200 g
- ***Salt:*** 18 g (1.5% of the total weight of meat and fat)
- ***Garlic:*** 3–4 cloves
- ***Ground black pepper:*** 1 tsp
- ***Mustard seeds:*** 2 tbsp
- ***Natural or artificial sausage casings:*** as needed

Note: Nitrite/curing salt is commonly used in meat products to preserve colour, flavour, and provide additional preservation properties. However, in hot-smoked sausages, where the temperature reaches about 80–90°C, nitrite salt may lose some of its properties. If you prefer a more natural product, you can use regular salt only. Additionally, pork fat provides the necessary texture and flavour for the finished product.

Preparation:

1. Preparing the meat and fat:

1. Rinse the pork and pork belly fat, pat dry, and grind using a coarse grinder plate.
2. Add minced garlic, ground black pepper, mustard seeds, and salt to the minced meat.
3. Mix the mixture thoroughly for 10–15 minutes until it becomes uniform and sticky.
4. Cover the mixture with cling film and refrigerate for 12–24 hours to allow the flavors to develop.

2. Forming the sausages:

1. Soak natural or artificial casings in warm water for 15–20 minutes to make them elastic.
2. Using a special nozzle or appropriate tool, tightly fill the casings with the prepared mixture, avoiding air pockets. If air bubbles appear, prick them with a toothpick or needle. Form sausages of uniform size.

3. Drying:

1. Hang the formed sausages in a well-ventilated area or place them on a rack.
2. Allow the sausages to settle and dry for 1.5–3 hours or longer, depending on the humidity and air circulation. It is essential that the surface of the sausages is dry before smoking.

4. Smoking:

1. Prepare the hot-smoking smoker, ensuring the temperature is 80–90°C.
2. Hang the sausages in the smoker, leaving enough space between them for smoke circulation.
3. Smoke the sausages until their internal temperature reaches 68°C. For thinner sausages, this may take about 2 hours; for thicker ones, up to 3 hours. It is recommended to use a food thermometer to monitor the internal temperature.

5. After smoking:

1. Remove the sausages from the smoker and hang them in a well-ventilated area to cool to room temperature. This may take several hours.
2. Once cooled, place the sausages in the refrigerator and let them rest for at least 12 hours to allow the flavors to mature and stabilize.

Storage:

- Hot-smoked sausages can be stored in the refrigerator (at 0–6°C) for up to 7 days.
- Vacuum-sealed sausages can be stored in the refrigerator for up to 14 days or in the freezer (at –18°C) for up to 2 months.

Additional tip:

When preparing the sausage filling, you can add your favorite spices or herbs, such as thyme, oregano, or cumin, to create a unique flavor.

Hot Smoked Pork Hock

Ingredients:

- ***Pork hock:*** 2 small ones (total weight around 1.7–2.3 kg)
- ***Water:*** 1.5 litres (or enough to fully submerge the hocks)
- ***Salt:*** 105 g
- ***Sugar:*** 40 g
- ***Garlic:*** 4–5 cloves
- ***Bay leaves:*** 3–4 pieces
- ***Black pepper (whole):*** 15 pieces
- ***Cloves:*** 4 pieces

Preparation Steps:

1. Preparing the Brine:

1. Bring the water to a boil and dissolve the salt and sugar in it.
2. Add the bay leaves, black pepper, and cloves.
3. Remove from heat and let the brine cool completely to room temperature.
4. Once cooled, add the minced garlic and mix thoroughly.

2. Marinating:

1. Place the hocks in the brine, ensuring they are fully submerged.
2. Refrigerate for 3–5 days, turning the hocks occasionally for even marination.

3. Preparing Before Smoking:

1. Remove the hocks from the brine and rinse them thoroughly with cold water.
2. Pat the hocks dry with paper towels.
3. Leave the hocks in a well-ventilated area or on a rack for 12–24 hours to allow the surface to dry completely.

4. Smoking:

1. Prepare a hot smoking setup with a temperature of 80–90 °C.
2. Place the hocks in the smoker, ensuring sufficient space between them for proper smoke circulation.
3. Smoke the hocks until the internal temperature reaches 70–75 °C. For smaller hocks, this takes about 2 hours; larger ones may take up to 3 hours. A food thermometer is recommended for accuracy.

5. After Smoking:

1. Remove the hocks from the smoker and leave them in a well-ventilated area for 2–3 hours to let the flavour and aroma stabilize.
2. After cooling, place the hocks in the refrigerator for final chilling.

Storage:

- **In the refrigerator:** Hot smoked hocks can be stored for up to 5–7 days.
- **Vacuum-sealed:** Vacuum-sealed hocks can be stored in the refrigerator for up to 2 weeks.

Hot Smoked Salmon

Ingredients:

- ***Salmon:*** 900 g (with or without skin, your choice)
- ***Salt:*** 60 g
- ***Sugar:*** 30 g
- ***Lemon zest:*** from 1 lemon (finely grated)
- ***Coarsely ground black pepper:*** 1 teaspoon (optional)

Preparation:

1. Preparing the seasoning:

1. Mix the salt, sugar, lemon zest, and, if desired, black pepper.

2. Preparing the fish:

1. Rinse the salmon and pat it dry with a paper towel.
2. Evenly rub the fish with the prepared seasoning mixture. Use all of the mixture to ensure the fish is well-coated.

3. Marinating:

1. Cover the salmon with cling film or place it in an airtight container.
2. Refrigerate for 4–8 hours to allow the seasoning to penetrate.

4. Drying:

1. After marinating, remove the salmon from the refrigerator and rinse it with cold water to remove excess salt.
2. Pat the salmon dry with a paper towel.
3. Hang the salmon in a well-ventilated area or place it on a rack. Allow it to dry for 2–4 hours until the surface is completely dry.

5. Smoking:

1. Prepare the smoker with wood chips (cherry, alder, or apple chips work well).
2. Preheat the smoker to 80 °C.
3. Smoke the salmon for 2–4 hours, depending on the desired flavour intensity, until the internal temperature of the fish reaches 57–60 °C.

6. After smoking:

1. Leave the salmon in a ventilated area for 1–2 hours to allow the flavour and aroma to stabilize.
2. Refrigerate for final cooling.

Storage:

- **In the refrigerator:** up to 3 days.
- **Vacuum-sealed:** up to 10 days.
- **In the freezer:** up to 2 months.

Conclusion and Recommendations

Thank you for choosing this book as your guide to the art of smoking food. We hope the provided information and recipes will help you discover new flavours and enrich your culinary experience.

If you are looking for high-quality smoking equipment, we recommend **Stollinger** cold smoke generators. These devices are reliable, easy to use, and suitable for both beginners and experienced smoking enthusiasts.

To learn more about the products or purchase them, visit our online stores:

- Stollinger product on TikTok Shop
- Stollinger product on Amazon
- Stollinger product on eBay

We also invite you to visit our YouTube channel, where you will find videos on how to assemble, maintain, and use smoking equipment properly. These videos will help you start the smoking process easily and make the most of your equipment.

In the upcoming season, we plan to upload more videos covering smoker construction, smoking nuances and tips, and sharing tried-and-tested recipes. Subscribe to our channel to be among the first to learn about our updates!

Good luck and happy smoking! If you have any questions or want to share your smoking experience, feel free to contact us through any of the above-mentioned platforms or our social media.

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